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The Effect of Simulation ANS Learning Motivation Method toward Civics Learning Outcome of Fourth Grade Students in Kertajaya V Elementary School

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Abstract:- The purpose of this study is to look for the effect of simulation methods and learning outcomes on student civics learning outcomes. Simulation methods and learning motivation are integrated to see the effect on student learning outcomes on human rights and obligations in fourth grade of environment Theme 7 Subtema 2. This research is a correlation study that uses quantitative research of Quasi Experiments and it is tested on students in fourth grade Kertajaya V elementary school Surabaya with Pretest and Postest Nonequivalent Control Group Design. This study determines of how much influence that the simulation method has and learning motivation on learning outcomes, simulation methods and student learning motivation simultaneously on learning outcomes. Based on the results of the study showed Fcount = 24.792>Ftable = 3.39 without the simulation method and learning motivation (X1 and X2 = 0), then the learning outcomes are only 35,038 without the simulation method and learning motivation of learning outcomes will rise to 84,794. It can be concluded that the simulation method and learning motivation have an effect on improving the learning outcomes of Grade IV students on Themes & Sub Themes 2 material rights and obligations of the community.

Keywords:- *Simulation Method, Learning Motivation and Learning Outcomes.*

I. INTRODUCTION

Elementary School is the initial level taken by students in formal education in Indonesia. Students in primary schools have basic experience that is very influential in further education levels. At the elementary school level, several subjects are taught, those are Civics, Bahasa Indonesia, Mathematics, Sciences, Social, Religion, English, Arts and Sport. Especially for Civics because they embed concepts and values so that the material is mostly in the form of memorization. Civics as a political education that aims to help students to become citizens who are politically, mature and participate in building a democratic political system (Sapriya, 2007).

Student understanding can be improved by using Simulation Methods in learning. Learning simulations are a series of learning techniques and strategies that involve individuals (students) in a real-life scenario through role play, socio-drama, psychodrama, games, and reflection to develop and strengthen the knowledge and skills learned in the classroom (Betts, Lewis. & Dressler, 2009). Besides learning simulations involving students are able to spur student motivation in learning which will later have an impact on improving student learning outcomes.

Simulation methods and learning motivation are expected to be able to improve student learning outcomes of Civics. Learning motivation is an internal and external endurances for students who are learning. Hapsari (2005) defines motivation into two types namely intrinsic motivation from within students and extrinsic motivation from outside students.

II. METHOD

The type of research used is experimental research with a quantitative approach. The research design used in this study was Quasi Experiment (pseudo) with Pretest Postest Nonequivalent Control Group Design. The independent variable in this study is the simulation learning method (X1), learning motivation (X2) while the learning outcomes are the dependent variable (Y). The study design began by making pretest questions for the two classes in order to determine the initial state of students. The next step for the experimental class was treated and the control class was not treated. Furthermore, at the end of learning the two classes are given a posttest question to find out the student's final learning outcomes.

Data collection by observation, questionnaire distribution and test delivery. Analysis of the data used is quantitative descriptive analysis, things done include:

A. Analysis of Validity and Reliability Instrument

Use the Product Moment Correlation formula to find out the validity of each item

$$r\,xy = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{\{N\sum x2 - (\sum x)2\}\{N\sum y2 - (\sum y)2\}}}$$

Information:

r_{xy} : Product Moment Correlation
X : Score Item (Amount X)
Y : Total score
Σ Y : Total Amount (Amount of Y)
Σ N : The number of subjects to be tested
ΣY^2 : Amount of Y2
ΣX^2 : The sum of X2

Research Instrument Reliability Test

B. Analysis of the Lesson Plan Implementation

Percentage of implementation of the Learning Implementation Plan can be obtained from the formula:

$$P = \frac{\text{The number of Lesson Plan steps which is implemented}}{\text{The whole steps of Lesson Plan}} \times 100\%$$

Interval	Category
0% ≤ P < 25%	Not implemented
25%≤ P < 50%	Less implemented
50% ≤ P < 75%	Well implemented
75%≤ P < 100%	Very well implemented

Table 1:- the lesson Plan implemented (Riduwan, 2012)

Average interval score	Average criteria score
1,00 – 1,8	Very bad
1,9 – 2,7	Bad
2,8 – 3,6	Good
>3,6	Very good

Table 2:- Average Interval Score and average score criteria in implementation of learning models

(adapted fromRatumanan& Laurens, 2006)

C. Analysis of Student Learning Outcomes

Analysis of cognitive learning outcome data can be calculated by referencing the results of students' posttests, using the formula:

Final score = $\frac{obtained\ score}{maximum\ score}$ x 100
(Purwanto, 2009, p. 207)

To find out the quality of learning outcomes for each individual is carried out as follows:

A = score 86-100 : very good/completed
B =score 75-85 : good/ completed
C = score56 -74 : enough/ not completed
D = less than 55 : bad/not completed

D. Analysis of classic assumption

➢ *Normality Test*

To check the assumption of normality is met or not using the Kolmogorov Smirnov test is to monitor the magnitude of the calculated p value on each variable which is studied.

- If the calculated p value (z tailed) ≥ 0.05 then the data is normally distributed
- If the calculated p value (z tailed) ≤ 0.05 then the data is not normally distributed

➢ *Multicollinity Test*

Multicollinearity is shown in the coefficients, namely the tolerance column and the VIF (Varian Inflated Factors) column. Multicollinearity occurs when VIF> 10

➢ *Heteroscedasticity Test.*

If in the regression model, there are differences in residual variance between one and the other. A good regression module is if there is no heteroskedacity

E. Regression Analysis

Regression analysis to determine the direction of the relationship between independent variables and variables The following is a general form of multiple linear regression equations:

$$Y = a + b_1x_1 + b_2x_2 + e$$

Information:
Y = Learning outcomes
a = Constant Value
b1 = Coefficient of Simulation Method
b2 = Learning Motivation Coefficient
x1 = simulation method variable
x2 = learning motivation variable
e = error

III. RESULTS ANS DISCUSSIONS

A. Instrument of Validity and Reliability

Validated components of this learning process are lesson plan, students worksheet and literacy tests, these components meet the valid categories and need a little revision to be used.

No	Aspect assessed	Validator score		Category
		V1	V2	
I	Syllabus	4,00	3,67	Very Valid
II	Material	3,50	3,50	Valid
III	Material Presentation	3,83	3,67	Very Valid
Whole average				**Very Valid**
Reliability		**95,21%**		**Reliable**

Table 3:- Materials Result

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No	Aspect assessed	Validator score		Category
		V1	V2	
I	Benefits of media	4,00	3,33	Very Valid
II	Media design	3,63	3,75	Very Valid
III	Operation of the Media	3,75	3,67	Very Valid
Whole average				**Very Valid**
Reliability		**97,20%**		**Reliable**

Table 4:- Media Result

B. Implementation of Lesson Plan Implementation

Percentage of implementation of the Learning Implementation Plan can be obtained from the formula:

Information	Lesson plan assessment		Average
	Lesson Plan1	Lesson plan 2	
Aspects implemented	17	18	
Aspect not implemented	1	0	
implementation	**94.4%**	**100%**	**97.2%**

Table 5

C. Analysis of Student Outcomes

Students code	Pretest		Posttest	
	Score	K	Score	K
S1	30	F	95	C
S2	70	F	100	C
S3	50	F	80	C
S4	35	F	95	C
S5	70	F	80	C
S6	35	F	95	C
S7	30	F	90	C
S8	70	F	100	C
S9	45	F	75	C
S10	35	F	90	C
S11	10	F	75	C
S12	80	C	100	C
S13	25	F	95	C
S14	60	F	90	C
S15	30	F	95	C
Average	**45.00**	**F**	**89.33**	**C**
Number of unfinished students		**14**	**Number of unfinished students**	
Number of complete students		**1**	**Number of complete students**	
Percentage of completeness (%)		**7%**	**Percentage of completeness (%)**	

Table 6

D. Analysis of Classic Assumption

➢ *Normalitas Test*

❖ *Normality Test*

One-Sample Kolmogorov-Smirnov Test					
		Pretest Eksperiment	Posttest Eksperiment	Pretest control	Posttest control
N		28	28	28	28
Normal Parameters[a]	Mean	59.29	79.29	58.93	69.29
	Std. Deviation	8.133	8.133	7.373	7.664
Most Extreme Differences	Absolute	.230	.230	.236	.216
	Positive	.230	.230	.228	.213
	Negative	-.192	-.192	-.236	-.216
Kolmogorov-Smirnov Z		1.219	1.219	1.251	1.141
Asymp. Sig. (2-tailed)		.102	.102	.088	.148

a. Test distribution is Normal.

Table 7

Data table shows 0.102 is greater than p arithmetic If the value of p arithmetic (z tailed) 0.12 ≥ 0.05 then the data is normally distributed

E. Regression Analysis

Regression analysis to determine the direction of the relationship between independent variables and variables The following is a general form of multiple linear regression equations:

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	35,038	6,485		5,403	,000
	Metode Simulasi	,444	,114	,662	3,884	,001
	Motivasi Belajar	1,333	1,173	,194	1,137	,266
a. Dependent Variable: Learning Outcomes						

Table 8

The coefficients table (α) shows that the multiple regression equation model for estimating learning outcomes that is influenced by simulation methods and learning motivation is: $Y = 35{,}038 + 0{,}444X_1 + 1{,}333X_2$.

Residuals Statistics[a]					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	64,39	86,62	79,29	6,631	28
Residual	-10,395	7,818	,000	4,708	28
Std. Predicted Value	-2,246	1,107	,000	1,000	28
Std. Residual	-2,124	1,598	,000	,962	28
a. Dependent Variable: Hasil Belajar					

Table 9

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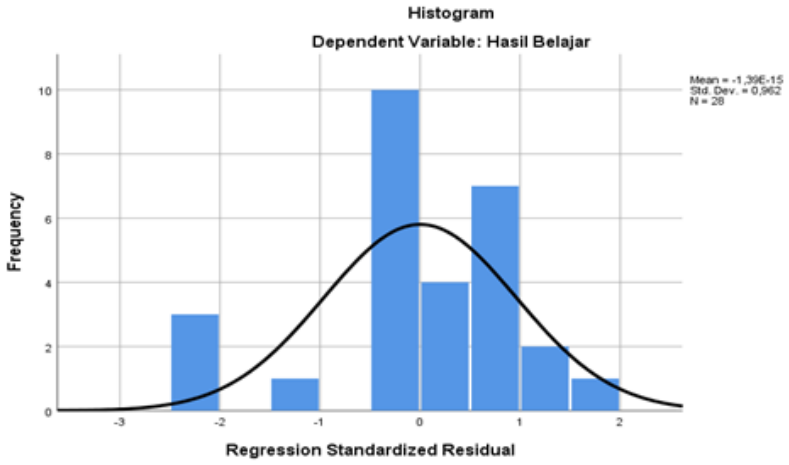

Fig 1

IV. CONCLUSION AND SUGGESTION

Simulation methods and learning motivation are feasible to improve student learning outcomes. There is a significant simultaneous effect between the use of simulation methods and learning motivation on learning outcomes. Suggestions for further research is that more learning methods need to be developed to improve student learning outcomes.

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